

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated November 23, 2004 and the telephone interview with the Examiner on February 3, 2005. Applicant respectfully thanks the Examiner for his consideration in conducting the interview with the Applicant's undersigned representative. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 10-22 are under consideration in this application. Claims 10 and 20-22 are being amended, as set forth above, in order to more particularly define and distinctly claim Applicant's invention. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Informality Rejection

During the telephone interview, the Examiner indicated the "document processing" or "document handling procedure" recited in claim 10 were too broad such that claim 10 fails to recite any tangible results which may subject to a 101 rejection.

As claim 10 now recites "said at least one hardcopy document handling procedure includes identifying document and identifying document format," the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejections

Claims 10-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. App. No. 20030078880 by Alley et al. (hereinafter "Alley") in view of US Pub. No. 20030019823 by Layeghi (hereinafter "Layeghi"). This rejection has been carefully considered, but is most respectfully traversed.

The document processing system of the invention, as now recited in claim 10, comprises: input unit for reading a storing means (e.g., text, an one-dimensional, 2D or 3D bar code, a magnetic tape, an IC chip; and an encoded print into a logo mark, photograph or some other graphic item, such as a watermark, photograph, holographic, p. 9, lines 1-9) on a **hardcopy document** (e.g., a bill or a commercial paper, p. 8, lines 1-2; p. 10, line 18; Figs. 2 & 9); document processing information, which includes a form or format information of the hardcopy document or at least one hardcopy document handling procedure to be executed in connection with the hardcopy document, extracting unit for extracting encoded (*“encoded document processing information is read and decoded to obtain the document processing information”* p. 12, lines 14-15) document processing information stored in the storing means; and document processor for executing document processing said at least one document handling procedure. The hardcopy document handling procedure includes identifying document and identifying document format (Fig. 10; pp. 16-17).

The document processing information *“on document forms or formats (p. 3, line 15)”* including *“the document form, the processing procedure, the processing method and the format of the document 201 are encoded into the two-dimensional bar code 202 and stated in a prescribed position, such as a corner of the document. In particular, the document handling procedure may be a document cutting step in conjunction with a document cutting position, a seal stamping step in conjunction with a seal stamping position, a document identification step in conjunction with a document ID, a document format identification step in conjunction with a document format ID, an encryption step in conjunction with a encryption key, or a decryption step in conjunction with a decryption key (p. 8, last paragraph).”*

The prior art described on pages 2-3 of the specification or a copier/scanner mentioned by the Examiner during the telephone interview are deficient in that they are time-consuming since they teach extracting the form or format of a document based upon the image of the overall configuration of the document (p. 3, line 8), rather than just extracting the encoded information stored in the storing means.

The invention is also directed to a document generating software product, as now recited in claim 20, comprising: a communication module for enabling a prospective

document user wishing to have a hardcopy document made to notify a document generator of requirements regarding a desired hardcopy document layout and a desired hardcopy document handling procedure; a document layout making module for making a document layout according to the requirements from said prospective document user; a document candidate presenting module for presenting to the prospective document user document candidates made by the document layout making module; a document selecting module for letting the prospective document user select a document candidate out of the document candidates presented by the document candidate presenting module; a document processing information determining module for determining document processing information including a form or format information of the selected document candidate or the desired hardcopy document handling procedure; a storing means module for selecting a storing means, encoding the document processing information, and for storing the encoded document processing information in the storing means; and a document processor for printing on or embedding the storing means on the hardcopy document, and for executing the desired hardcopy document handling procedure in connection with the hardcopy document. The hardcopy document handling procedure includes identifying document and identifying document format.

The invention is also directed to a software product for providing a hardcopy document, as recited in claim 21, comprising a module for printing on or embedding in the hardcopy document a storing means, wherein said storing means stores encoded document processing information, which includes a form or format information of the hardcopy document and at least one hardcopy document handling procedure to be executed in connection with the hardcopy document, and the hardcopy document is subject to and readable by a document processing apparatus for executing said at least one hardcopy document handling procedure in connection with the hardcopy document. The hardcopy document handling procedure includes identifying document and identifying document format.

The invention, as recited in claim 22, is also directed to a hardcopy document having a storing means printed thereon or embedded therein that include encoded document processing information, which includes a form or format information of the hardcopy

document or at least one hardcopy document handling procedure to be executed in connection with the hardcopy document, and the hardcopy document is readable by a document processing apparatus for executing said at least one hardcopy document handling procedure in connection with the hardcopy document. The hardcopy document handling procedure includes identifying document and identifying document format.

Alley fails to teach or suggest such a "storing means printed on or embedded in a *hardcopy document* and stored with encoded information for processing the hardcopy document" of the invention. In contrast, Alley only processes *electronic documents* ("*electronic signing of digital documents*" Abstract; transmitted via internet to be digitally signed in Fig. 2). The contents of Alley's electronic documents/data are inherently encoded/digitized to be easily manipulated electronically. On the other hand, the contents of a hardcopy document are primarily interpretable for human eyes such that the prior art described on pages 2-3 of the specification has to translate the human interpretable texts or images on a hardcopy document into digitally/electronically interpretable data via an optical character reader (OCR). Layeghi concerns MP3 format electronic files and "Internet documents" ([0021]) such that it shares the same deficiencies as Alley.

The invention incorporates 'a hardcopy document' and 'hardcopy document processing information that is digitally/electronically interpretable' via a "storing means printed on or embedded in a hardcopy *document* and stored with encoded information for processing the hardcopy document." Otherwise, the human interpretable contents of the hardcopy document is not directly interpretable by the document processor.

Although the invention applies a general storing means stored with encoded information as Alley, the invention prints on or embeds in the storing means stored with encoded information for processing a hardcopy document on the hardcopy document to achieve unexpected results or properties. For example, to extract encoded hardcopy document processing information from the storing means so as to directly process a hardcopy document with digital/encoded information to save time and cost (without translating into any human interpretable format, such as human interpretable texts or images which have to be processed via an optical character reader or the like). The presence of these unexpected properties is evidence of nonobviousness. MPEP§716.02(a).

“Presence of a property not possessed by the prior art is evidence of nonobviousness. In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (rejection of claims to compound structurally similar to the prior art compound was reversed because claimed compound unexpectedly possessed anti-inflammatory properties not possessed by the prior art compound); Ex parte Thumm, 132 USPQ 66 (Bd. App. 1961) (Appellant showed that the claimed range of ethylene diamine was effective for the purpose of producing " 'regenerated cellulose consisting substantially entirely of skin' " whereas the prior art warned "this compound has 'practically no effect.' ").

Although “[t]he submission of evidence that a new product possesses unexpected properties does not necessarily require a conclusion that the claimed invention is nonobvious. *In re Payne*, 606 F.2d 303, 203 USPQ 245 (CCPA 1979). See the discussion of latent properties and additional advantages in MPEP § 2145,” the unexpected properties were unknown and non-inherent functions in view of Alley, since Alley does not inherently achieve the same results. In other words, these advantages would not flow naturally from following the teachings of Alley, since Alley fails to “print on or embed in the storing means stored with encoded information for processing a hardcopy document on the hardcopy document”.

Applicants further contend that the mere fact that one of skill in the art could rearrange Alley to meet the terms of the claims is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for one skilled in the art to provide the unexpected properties, such as “to extract encoded hardcopy document processing information from the storing means so as to directly process a hardcopy document with digital/encoded information to save time and cost,” without the benefit of appellant's specification, to make the necessary changes in the reference device. *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). MPEP§2144.04 VI C.

Applicants contend that Alley does not teach or disclose each and every feature of the present invention as disclosed in at least independent claims 10 and 20-22. As such, the

present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

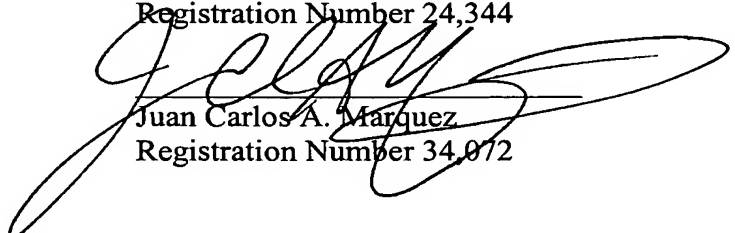
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

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